Quality Measures Workgroup: Patient Safety Task Force
Draft Transcript
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Presentation

Neil Calman – Institute for Family Health – President & Cofounder
Welcome, everybody. Good afternoon for those of you on the East Coast, and on the West I guess it's still good morning. This is the third meeting of the Patient Safety Tiger Team, which is part of the Quality Measures work that's going on with ONC, all designed towards trying to develop measures that could be incorporated into the 2013 and 2015 meaningful use criteria. I'll start by giving, actually if we do a roll call first of the people on the phone. Does somebody have the list of the total?

Leah Marcotte – ONC
I can pull it up.

Neil Calman – Institute for Family Health – President & Cofounder
While Leah's doing that let me just make two other comments. One is that the call's going to go from 2:00 to 4:00. I know it was scheduled from 2:00 to 5:00 but we're going to shorten it for a few different reasons. One is that I don't think that there's anything we can accomplish in three hours that we can't accomplish in two. Second of all, I just don't want people to be dropping off at the end of the call. People have some conflicts, including myself, that would make it difficult to go all the way to 5:00. So rather than just have people dwindle off, I think we'll just call it at 4:00.

The second comment that I'll make is that the product that we need to really produce by the end of the day today is some recommendations about patient safety measures, first, to lock in on the sub-domains, both for eligible providers and hospitals, and second, to come up with some general concepts of measures that we think are important, just to say that we do not have the responsibility, thank God, nor the authority to delineate the measures that are going to be carried forward.

This will get picked up at least three more times, maybe four more times before this will come to finalization. So we're the beginning idea generators. There will be additional opportunities for people to generate other ideas. There will be input from the full Quality Measures Workgroup. There will be more input from the Meaningful Use Workgroup. There will be more input from the entire HIT Policy Committee, and I'm sure for those things that involve it from the Standards Committee and then from staff at ONC that work incredibly hard on these things going forward, and then finally from CMS.

So people shouldn't feel like there are five people here deciding on the future of safety measurements for the country, actually we're brainstorming and generating ideas and they're going to go through many other iterations and perhaps or perhaps not be recognizable when they come out the other end. I tell myself that because I don't want to have five of us take responsibility for designing what's going to happen around patient safety measures for the country. I think we need the wisdom of hundreds, if not thousands of more people for input. I think, having gone through this process before, I'm confident that the multiple places that this gets discussed and will get discussed will provide for that opportunity.

Leah, are we ready to get who's on the call?

Leah Marcotte – ONC
Yes. Russ Branzell?

Russ Branzell – Poudre Valley Health System – CIO
Here.

Leah Marcotte – ONC

Jacob Reider?

Jacob Reider – Allscripts – Chief Medical Informatics Officer
Here.

Leah Marcotte – ONC
Tripp Bradd?

Tripp Bradd – Skyline Family Practice – Physician
Present.

Leah Marcotte – ONC
Daniel Artley.

Daniel Artley
Present.

Leah Marcotte – ONC
I think that's actually everyone. Did I miss anyone?

Neil Calman – Institute for Family Health – President & Cofounder
No, I think we've got it. Good, and then from ONC it's yourself, Leah?

Leah Marcotte – ONC
Yes.

Neil Calman – Institute for Family Health – President & Cofounder
Let me start off with three minutes of at least my opinion of where we're at. Great thanks to Leah for putting materials together and for updating the information that has been put out before.

Where I think we're at is that we've identified a number of potential sub-domains for the discussion of patient safety. In reviewing these, and I discussed this with Leah earlier, it seems to me that they're predominantly, except for the medication safety issue and a little bit on the falls, that they're predominantly hospital measures, which is not surprising since that's where the majority, I think, of discussion about patient safety has come from and where the work's been done. So we have a little bit of an imbalance. Really, I think the medication safety is the number one issue and really the major meaningful issue that we've discussed in relationship to eligible providers, and then we have the falls, VTE prevention, patient identification, hospital associated infections, as well as medication safety, all called out as potential domains for the hospital side.

Does anybody have a different recollection of that, or want to throw their hat in to that discussion first?

M
... like it.

Neil Calman – Institute for Family Health – President & Cofounder
What I was suggesting is that maybe we'd kind of divide this discussion a little bit and talk about what we'd like to call out on the medication safety front for ambulatory care. Then I think on the hospital side we need to just review those areas, those domains again, and decide if there's one or two of them that we want to call out as being most important, or three of them, or four of them, and then come up with some rough ideas of measures that we think would be worthwhile in those areas. Does that sound like a plan for folks?

Jacob Reider – Allscripts – Chief Medical Informatics Officer

It sounds good. I was on an airplane last Friday so I missed the call, unfortunately, but wonder if there's also an opportunity to think, or brainstorm, as you described earlier, about things we might add to the ambulatory domain, because I agree there's clearly an imbalance here.

Neil Calman – Institute for Family Health – President & Cofounder
We can start with that if there's additional domain areas that you think related to patient safety we could add, that would be great. Do you just want to toss those out right now?

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I would throw one out, and we can kick it around. Since my domain representing the vendor community is what I should be allowed to talk about, so as a family doc I can think about that kind of stuff, but so can you, but in the EHR domain there's actually been a lot of interest, both with the Grassley discussions and in our industry, about patient safety matters around electronic health records. So I wonder if we might not want to just call that out and say, hey, let's be proactive about this, and are there patient safety related issues, much like there are medication issues, that involve the use of EHRs, period. Would there be measures that we could define around events that would occur? We know some of them, right, so there are medication selection errors or even selection errors that occur when the EHR facilitates the selection of the wrong thing more easily than has happened on paper. So I throw that out just for consideration, not with any other—

Neil Calman – Institute for Family Health – President & Cofounder
Any other things, any other ambulatory care things that you couldn't speak of because you were in the air?

Jacob Reider – Allscripts – Chief Medical Informatics Officer
Medication is obviously going to be the most significant opportunity for error, so I would just validate that one. There are diagnostic errors, and I'm not sure how to look at that. But if we look at the kinds of things that happen in the outpatient environment that result in bad things happening, medication errors are probably the first, but diagnostic errors and then the sequelae of the diagnostic errors, which might include testing, unnecessary testing, and other things that would be byproducts of inaccurate diagnoses, would probably be another opportunity.

Tripp Bradd – Skyline Family Practice – Physician
One thing that you mentioned, and I was thinking about that, I always worry about IGBOs, which I got burned once. One of the problems I can see with EHRs and its use is reports that somehow get into the record but are never reviewed and how you'd ever make that HIT sensitive I never know, except make it a numerator or a denominator. But that is something that I've seen as a big ... issue, if you will, administrative malpractice might be a good description of what that is. Wouldn't folks agree that that is something that occasionally happens from time to time, both on the hospital and outpatient side?

Jacob Reider – Allscripts – Chief Medical Informatics Officer
Absolutely.

Neil Calman – Institute for Family Health – President & Cofounder
It can't happen in our system but I assume that there are some where it could.

M
Especially in a world of paper still there, stuff is being filed and faxed and auto fed and there's no alerting and replying system built in a lot of EMRs.

Neil Calman – Institute for Family Health – President & Cofounder
I think that's actually excellent. If that's a real issue I think that's an excellent example of a very specific kind of safety issue that's relevant to ambulatory providers.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I agree. That's the kind of thing that I was actually thinking of in the EHR domain.

So, Neil, as you say, that's not possible, I would argue, and I've seen it happen.

Neil Calman – Institute for Family Health – President & Cofounder
I didn't say it's not possible. I just said it's not possible in our system, because there's nothing on paper. Everything has to be sent to a provider for counter signature before anything else happens to it.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
So reviewed and counter signed are actually different, right?

Neil Calman – Institute for Family Health – President & Cofounder
Well, they'd better not be.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I'm with you. So I think it's interesting to parse that out, and again, I don't want to split hairs.

Neil Calman – Institute for Family Health – President & Cofounder
No, I think it's a great issue. If it's a significant issue for people I think it's something we can call out.

Tripp Bradd – Skyline Family Practice – Physician
I think Leah mentioned it too, Neil, was click fatigue or click through stuff, this is a good example of a provider clicking through a report and counter signing it such that, yes, it's counter signed but there might have been that, for instance, one nodule that was never acted on because they just put through a particular counter signature.

M
This could probably feed into a fairly easy metric of the standard would be results filing electronically regardless of location and then we would file a metric that said some kind of standard that said abnormal results or any results must be acknowledged and received electronically and then someone to define what that means within "x" period of time and what's the percentage of that.

Neil Calman – Institute for Family Health – President & Cofounder
So we can catch that, but we're not going to catch the person who takes a quick glimpse at it and then doesn't look at it carefully. I don't think we're going to catch that.

Tripp Bradd – Skyline Family Practice – Physician
How about reported to the patient, would that be a safety feature? Any report that comes in is reported.

Neil Calman – Institute for Family Health – President & Cofounder
Yes, and actually I was participating on another call on the patient engagement area and I think that you'll see that well included as part of the summaries for people to get copies of testing that's been done in the interval as part of their, what you call a discharge summary but either from an office visit discharge or from a hospital discharge. I think that has been called out, not just as a way of sharing information with people but also patients looking at things themselves, they have a lot of vested interest in making sure nothing got missed.

Tripp Bradd – Skyline Family Practice – Physician
For us that's the last failsafe because sometimes we'll say well, what about that ..., that ... is that something to worry about?

Neil Calman – Institute for Family Health – President & Cofounder
Right.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I think this is a great example of how closing that loop with the patient might actually allow us to capture information. That's really what I'm aiming for, Neil, is what you just described, that sometimes we will miss the scenario where the doc just clicks through or acknowledges but doesn't really sign off on

something. But then if you close the loop and somehow you can catch or even just solicit information about the fact that that error occurred, that's important feedback for the EHR community and the vendor community. That's what I'd love to get at because we're never going to identify these design flaws. We won't identify these design flaws in products unless we develop methods of capturing those kinds of errors, if that makes any sense.

Neil Calman – Institute for Family Health – President & Cofounder
Yes. So the challenge there will be something that hopefully we don't have to deal with today, which is how one would go about measuring that. But I think we should think about what we would like the measure to include. So let me just first do a check in, does everybody think that the safety issue being the acceptance into the medical record of unreviewed results from diagnostic testing or consultations, that would be the way we would call out the safety issues? Does everybody think that that's a worthwhile thing to include on the ambulatory care list?

Russ Branzell – Poudre Valley Health System – CIO
Yes.

Tripp Bradd – Skyline Family Practice – Physician
Yes.

Neil Calman – Institute for Family Health – President & Cofounder
That's two of the four everybody's.

Leah Marcotte – ONC
I agree. I also think that this does fit into the larger issue of diagnostic errors. I think there's emerging patient safety literature regarding this issue, and there's actually a great review in *Health Affairs* by Bob Walker, kind of recent, a few months ago, I think. So I think that this is a great aspirational measure concept that we can highlight in the final recommendations.

Neil Calman – Institute for Family Health – President & Cofounder
Okay, great. So we're going to add that to our list. While we're on it, so we don't have to come back to this, why don't we talk about what we'd like to measure? Since this is the last call of this Tiger Team, why don't we talk about what we would want to measure there? Can somebody just say more clearly, just give a general description of what that measure would look like?

Russ Branzell – Poudre Valley Health System – CIO
I'll give it a shot. I think in that area we would want to have some kind of measure of the number of results that are being fed to the system, which should be all, and a percentage of those that are acknowledged within some period of time. If it's an abnormal it should be some short period of time.

Neil Calman – Institute for Family Health – President & Cofounder
So the number of the results that are fed into the system and the number that are reviewed within a specific time frame?

Russ Branzell – Poudre Valley Health System – CIO
The expectation would be there that somebody defines what a realistic measure should be.

Neil Calman – Institute for Family Health – President & Cofounder
I don't think that normal or abnormal makes sense, because in a sense for a lot of these reports you don't know if they're normal or abnormal until you've actually looked at them. So I don't want to give somebody a pass on waiting two months to look at something just because it happened to have turned out to be normal. I think our point is we're going to look at the results fed into the system and we expect that they're going to be reviewed within a specific time frame, period. Now, the question is what is that time frame?

M

As you pointed out, that's ... we don't have to—

Neil Calman – Institute for Family Health – President & Cofounder
Well, it's going to be the next question asked, so we can at least think, are we going to say within three days or what would you want to say for routine results?

M
I think you've got to be careful there. I know we've got an initiative right now and I think it's some kind of certification and/or requirement for things such as stat results and others to be acknowledged within 24 hours, and I think specifically related to radiology reports. Our radiologists actually have to call the person and .... So there might be some other standards out there that drive this, but it seems ... routine you're probably within 48 hours or 72 hours.

Tripp Bradd – Skyline Family Practice – Physician
Just to carry that over, sometimes you look at the outliers or exceptions, a good example might be a Rocky Mountain Spotted Fever titer, you have a guy that even though you might have chosen to treat, that slightly esoteric lab may be outside of your three day window. Then likewise complex radiologic testing sometimes requires consults within the radiology department—

Neil Calman – Institute for Family Health – President & Cofounder
Well, we're not specifying the time from ordering to getting the results. We're specifying the time from when the result is received to when it's reviewed.

Tripp Bradd – Skyline Family Practice – Physician
Okay, that's fair.

Neil Calman – Institute for Family Health – President & Cofounder
Because I would agree with you, there's a six month wait for routine mammography in New York right now.

Tripp Bradd – Skyline Family Practice – Physician
Wow!

Neil Calman – Institute for Family Health – President & Cofounder
Yes, do you want to open a mammography practice? I've got a few good locations for you.

M
Send them all to Colorado and they can do it as part of their vacation.

Neil Calman – Institute for Family Health – President & Cofounder
Yes. Anyway, well we'll just put a range, the recommendation is 48 hours to 72 hours, but to be reviewed.

Tripp Bradd – Skyline Family Practice – Physician
How about two to three business days?

Neil Calman – Institute for Family Health – President & Cofounder
I can say that too.

Leah Marcotte – ONC
I think that that's great. Again, the evidence for diagnostic errors at this point is really very slim, so I think this is also something probably we're going to look at for stage three and put this as an aspirational measure, and also we can include it in the methodological issue for that Tiger Team to deal with as well.

Neil Calman – Institute for Family Health – President & Cofounder
But this isn't really a diagnostic error, what we're talking about.

Leah Marcotte – ONC
I think it's part of the realm of diagnostic errors because—

Neil Calman – Institute for Family Health – President & Cofounder
Not really. This is really IT related. One of the dangers in the system is that you used to get paper—

Leah Marcotte – ONC
Yes, that's true.

Neil Calman – Institute for Family Health – President & Cofounder
... and it was very visible and people had little folders and tickler systems and other things like that. We've taken people, at least people of my generation, out of that mechanism that they've worked with their whole life into a totally different workflow where we're just trying to make sure that people are covering and looking at stuff in a timely way. So I think it's the starting point, or at least one type of diagnostic error, but I don't think it's going to need as much evolution as some other more complex diagnostic errors.

Leah Marcotte – ONC
Yes, I agree. But I think we should put that as the aspirational measure group because I don't think that there are any measures that are developed at this point ... that.

Neil Calman – Institute for Family Health – President & Cofounder
Okay. So while we're on the ambulatory care side, let's talk about medication safety. What I'd like to do is just think about two or three general concepts that we would like to call out as potential measures for the medication safety domain, for ambulatory care now, and then we'll come back to the domains for the hospital side.

Russ Branzell – Poudre Valley Health System – CIO
Where did we put patient identification last time, in which bucket did we put that in? Was that in medication errors?

Neil Calman – Institute for Family Health – President & Cofounder
We gave it its very own category added to the list of inpatient measures, because the patient identification we said went across more than just medication. It was medication, surgical procedures, intravenous lines, anything. So I think we gave it its own bucket.

Russ Branzell – Poudre Valley Health System – CIO
The reason I say that is I was reviewing the Joint Commission Accreditation program and specifically under their ambulatory and office based surgical procedures one of their top goals is to improve patient identification and accuracy in those areas. So maybe when we talk about ambulatory issues we can throw that in there as well. Especially if we're going to talk about medication relative to ensuring that the equivalent of that closed loop medication occurs in an office practice, especially when you're dealing with dispensed drugs in the office, which many practices do now.

Neil Calman – Institute for Family Health – President & Cofounder
Correct.

Russ Branzell – Poudre Valley Health System – CIO
Even if it's samples, there's no bar coding. They just go to the closet and grab samples and throw it in a bag. They don't do any bar coding. They don't do any patient safety checks to ensure that was the right drug they grabbed out of the closet. So the equivalent errors could occur right in an ambulatory environment and do we want to apply the same standards to an ambulatory environment that we do an inpatient relative to closed loop?

Tripp Bradd – Skyline Family Practice – Physician

Absolutely. I actually in my testimony sort of brought out an error that was brought through from the pharmacy side on eScripts. I had a refill of the patient for quinidine, just to give you a good example, which as many of you know is a cardiac medication, actually I had sent it as quinine, and the refill was for quinidine. Again, it was just a med error identification they associated with another patient and somehow it crossed over, so absolutely in the ambulatory side. This happens and luckily my EHR caught it. But the patient—

Neil Calman – Institute for Family Health – President & Cofounder
Was that identification of the wrong patient or the wrong medication? It sounds to me more like one of those look alike, sound alike medication errors.

Tripp Bradd – Skyline Family Practice – Physician
It was kind of like a John Smith and a John Smith on their side, and luckily when it crossed over we were able to identify it. But you're right about the wrong medication also, but it ended up being an ID problem too. So it does happen and we've had people call in for something, identify themselves, and it's the wrong person, because someone transcribed it incorrectly, for instance.

Daniel Artley
The question would be do we want to ensure this occurs, and thinking outside the box even more of just the physician office and the hospital base, it's the entire medication process. We'd come home with a bag of drugs for my son, who's going through chemotherapy, and the wrong drug was in the bag. Now, they scanned the outside and the label correctly when we got there and checked, but they didn't open it up and check to make sure that the right stuff was inside. We could easily have given him the wrong stuff.

So how do we remove this completely from the hospital base of somebody sitting in a bed, which is easy relative to the rest of this? How do we ensure that medication safety occurs in a complex multiple step process, never mind offices that do their own dispensing now or have their own pharmacy downstairs, like in a large multi-specialty group?

Neil Calman – Institute for Family Health – President & Cofounder
Yes, and there's another error source in some of the EHRs, including ours, that allow you to keep multiple patient records open at the same time so that you can click from one to the next. So if you're working with two or three exam rooms you can actually have the record open and when you log in, in the exam room you see three tabs with the three patient names on it that you're dealing with simultaneously while one's getting dressed and the other's getting undressed. It is not uncommon to just go in and start writing a note about somebody and then realize it's not them, that you're in the wrong tab or something like that. I think that's another example of an EHR supported error that could, with ePrescribing and everything, that you can get the wrong prescriptions out to somebody and they could go pick it up at their pharmacy but you never really had a chance to review that with them.

Russ Branzell – Poudre Valley Health System – CIO
Right.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I think that's a great example, Neil, of an EHR related issue. I know this is outside of the medication domain potentially, but it reminds me that if we were to— Perhaps it's an aspirational measure, but what if we were to look for a measure, for example, the number of patient safety issues related to EHR use that were reported, period. We're not doing anything other than trying to capture those because right now it's all anecdotes. The anecdote you just reported, Neil, I completely agree. That's happened to me personally and I've seen it happen to many of our customers. These are design flaws that exist in many of our systems and we try and make things really easy for people, but by making things easy we also facilitate risk in some places. So the better we can identify those risks then I think that for stage two we might just say, is there a method of capturing those potential patient safety issues that occur and are facilitated by EHRs, and just stop there and ask questions so that we can start to capture the data—

Neil Calman – Institute for Family Health – President & Cofounder
Just to amplify on that, I think we are at a stage in this where it would be very important to just have reporting. In other words, for a system to be able to prompt the provider to quickly report on a near miss or an error that was related to the functionality of the electronic health record. That doesn't have to be a percentage. It doesn't have to be a minimum number. In a sense we're asking, and we had a discussion about this in one of our prior calls, for a quick method of reporting.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
Exactly. So if that existed and we can capture those and if we put that as a potential stage two quality measure, man, that would give us incredible opportunity for significant improvement in this system that will become the primary method of care provision in this country.

Neil Calman – Institute for Family Health – President & Cofounder
Right. Well, just so you know, in the public health domain there's a lot of discussion that we've been having about a similar type of a hot button for things that a provider would be in the middle of an encounter and would either want, because it's required by the health department, or want because they think it's important to report to the health department. Just a quick way to populate a transmission that has the appropriate information in it and whatever, I think there could be a parallel here that wouldn't require a whole new type of development, since I think it's going to become part of the public health requirements that that kind of quick report functionality be developed.

Tripp Bradd – Skyline Family Practice – Physician
The assumption would be that everyone makes errors, let's make sure you try and report one during any reporting period, right?

Neil Calman – Institute for Family Health – President & Cofounder
Exactly.

Tripp Bradd – Skyline Family Practice – Physician
So you've got to encourage it.

Russ Branzell – Poudre Valley Health System – CIO
The other part that I'll take this back to is on the error prevention side, and that is there are still many places outside the walls of a hospital in an ambulatory environment where they do not have the same CPOE closed loop medication requirements that they do that we're trying to make ... happen through this program on the hospital side. There's office-based infusion, there's office-based urgent cares, they're administering and giving out drugs, and they do not have the same requirements right now for the closed loop medication requirements. I think we need to probably consider that that's just as high a potential for error as it is as I'm sitting in the ICU.

Neil Calman – Institute for Family Health – President & Cofounder
How would you operationalize that, for example, in somebody giving out a sample that the drug reps left? How would you operationalize something?

Russ Branzell – Poudre Valley Health System – CIO
I think it would be the exact same requirements for verification of drugs, two factor authentication, the five rules for medication safety apply in the ambulatory environment and must be built into the EMR. There are just as much medications being distributed out in the ambulatory environment as there probably is in the inpatient environment, so I don't know how you do that. The hospital system obviously has a closed loop medication system for bar code meds, verification, documentation in the system, and the EMRs, to my knowledge, aren't built the same way, but they could be. Just as easily when my doctor walks in and says here's your sample of whatever, one of the requirements are they do the same thing as if they walked into my hospital room and said here's your drug.

Jacob Reider – Allscripts – Chief Medical Informatics Officer

There's a lot of infrastructure, though, and I'm worried. So with my vendor hat on now, especially I'm a big vendor, but think about the small vendors and one or two doc practices that don't have infrastructure that would support bar coding. So I'm not saying that's not possible or even necessary, but that would be a pretty high bar and we'd need to give folks a pretty good head's up about that.

Russ Branzell – Poudre Valley Health System – CIO
But if we're talking about stuff that's going to make a meaningful impact in reduction of errors—

Jacob Reider – Allscripts – Chief Medical Informatics Officer
Yes, agreed. Yes, and—

M
... scope of that?

Neil Calman – Institute for Family Health – President & Cofounder
Yes, that's what I was going to ask too. I think before we call out something that's going to completely revolutionize the way somebody's handed a drug sample, it's a lot easier to say no samples, which is what we did 25 years ago. But I think that if you're going to have them I wouldn't begin to be able to describe a process of how that could all work without enormous infrastructure.

I'm going to take the prerogative of the chair and try to move us along to the medication safety piece. I know we've sort of been toying with it here and there, but we need to come up with some suggested measured concepts for medication safety for the ambulatory side. There's a two pager that Leah sent out, and that's got some bolded measure concepts, so I'd like to start with those, at least with the first one, "Reporting Adverse Drug Events."

I think we, in the first call, had a pretty good agreement that the actual reporting was a really important part of this and just like we're reporting on these safety measures related to EHRs I think a quick reporting mechanism for adverse drug events would be essential so that if that can be done electronically directly into the error system, that would be terrific. But do we have any discussion on that?

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I would agree. So let's think about what a measure of that would be, maybe number or percentage of medications for which adverse drug event was documented.

Tripp Bradd – Skyline Family Practice – Physician
That would show up, to carry it further it would show up in the allergy/intolerance table of any EHR, so there would be some linkage there.

Neil Calman – Institute for Family Health – President & Cofounder
This is different than the decision support piece, because presumably if you have decision supports in place it would stop people from making those kinds of errors.

Tripp Bradd – Skyline Family Practice – Physician
Let me give you an example, to wrap this around a little bit. You give a sulfa drug and they develop a rash. That's an adverse drug event. Then you would then subsequently have to log the sulfa drug in as the allergy. I think that way you would track it, that would be an automatic kind of thing and I think the behavior of most, well, I have to say most physicians or practitioners, not just physicians, would be to log adverse events in the allergy section or intolerance section. Would that be a reasonable way of looking at that?

Neil Calman – Institute for Family Health – President & Cofounder
Would you consider that a reportable adverse drug event? Would you?

Jacob Reider – Allscripts – Chief Medical Informatics Officer

I think that's the key, if it is. What if the EHR facilitated the reporting of the adverse drug event? So wouldn't that be remarkable, because we know that we as a group, physicians as a group, do a rotten job of reporting these things. But if the EHR facilitated it, and that's why I expressed it in the way I did, the percentage of medications for which an adverse drug event was reported, not just documented, we can document that the patient had a seizure when they got bupropion, but if I didn't report that it doesn't do anybody else any good. Isn't that what you're aiming for, Neil?

Neil Calman – Institute for Family Health – President & Cofounder
Yes, it is. This might be one of those measures where we could use an improvement type measure or a delta measure, as they're calling them, where basically we're saying— The difficulty with the delta measures is that there needs to be a measurement of the before, which is hard to do because before you started measuring it you don't have any measures. I don't think we're looking to go back and do this historically, but you could call out a goal by 2015 and to basically think about some way of calling out a path to that goal in 2013.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I think you're right. Initially, going backwards would be impossible. It's tricky because ideally the number of adverse drug events that I have is zero, so we don't want to set a goal that's, whatever, one percent of my prescriptions result in adverse drug events, because of course that would be crazy. So we don't want people to have high numbers, but we still want them to report. So I think I'd still be looking for an absolute number which then would be of value because of the model—

Neil Calman – Institute for Family Health – President & Cofounder
So what if in 2013 we called out the need for a quick reporting mechanism with some sort of interface to errors, either electronic or through fax server or something, to the error system and the measure is that people have reported at least one adverse drug event, if—

Daniel Artley
I guess the part I'm confused on this, adverse drug event, the example that was given was something that had happened but it wasn't an avoidable one because you didn't know the person was going to have an issue with it. I thought the intent of this one was I know that I'm allergic to penicillin and somebody gave it to me anyway.

Neil Calman – Institute for Family Health – President & Cofounder
I think we're looking at both. In the second type of error definitely, the second one you mentioned. But I think we're also looking at a completely inadequate national system for capturing information on adverse drug reactions and the potential for electronic health records to create a major improvement in patient safety just by calling these things out. So for example if everybody started reporting adverse drug events related to all these medications we'd know a heck of a lot more about what the side effects are and the drugs that have been on the market for eight years before we realized that there's three times the prevalence of congestive heart failure and things that I think— So we're looking at it at that level, as well as just the level of the individual practice.

Tripp Bradd – Skyline Family Practice – Physician
It's almost like a phase five—

Neil Calman – Institute for Family Health – President & Cofounder
It's a public health, almost, measure.

Tripp Bradd – Skyline Family Practice – Physician
It's a phase five clinical trial.

Neil Calman – Institute for Family Health – President & Cofounder
Yes.

Russ Branzell – Poudre Valley Health System – CIO

So if that's the case then I would say the opposite of the one, which is all of the adverse events should be reported in the system. It must be documented and it must be reported. So we want to make sure it's documented in the EMR, so 100% are documented in there, and the EMR has the ability to export that report off to the system.

Neil Calman – Institute for Family Health – President & Cofounder
Leah, can we call that out as a concept and not necessarily have to figure out how we're going to measure it?

Leah Marcotte – ONC
Yes, that's totally fine. Also, I was just going to, whether this is helpful or not, in one of the papers funded by Art that I sent out on adverse drug events, they split it, and we talked about this, it's not great language, but they split the adverse drug events into adverse effects of drugs properly administered and then they called drug poisoning, which we can think of another term to use, but as any accidental overdose, wrong drugs given or taken in error, or drugs taken inadvertently. So if you wanted to separate those out into two measure concepts that would be an option as well.

Neil Calman – Institute for Family Health – President & Cofounder
So 90% of them were adverse effects of properly administered medications?

Leah Marcotte – ONC
Yes, and this paper makes me a little bit skeptical because another Art paper that I looked at, that was three years prior, had said that most adverse drug events happened because of medication errors on the part of providers. So I'm not completely convinced about this, but it is actually a nice framework to think about the two different adverse drug effects.

Neil Calman – Institute for Family Health – President & Cofounder
Right, that's a good idea.

Russ Branzell – Poudre Valley Health System – CIO
It seems like there's a significant difference between an event and an error.

Leah Marcotte – ONC
Right, so we could just use these definitions broadly and discuss the language later or give it different language.

Neil Calman – Institute for Family Health – President & Cofounder
Okay. So I like the idea of focusing on the adverse drug events in the context of high risk medications that cause problems if they're administered in the wrong dosage or administered wrongly to a patient. I think that's the third bullet, I'm looking at the two pager that Leah sent out.

Tripp Bradd – Skyline Family Practice – Physician
This goes back to, and of course stage one is reconciliation. I think this will actually buttress that, if you will, because that's where you really catch a lot of errors is in the reconciliation phase. So it will be interesting to see how this unfolds.

Neil Calman – Institute for Family Health – President & Cofounder
The med reconciliation, I have a note in the margin here to basically bring that up as another thing that we might just want to create a measure for in the medication safety.

Russ Branzell – Poudre Valley Health System – CIO
The other part that I would throw out to consider is we keep using the term "administered," but do we want to include ordered on this because a lot of this will get caught on the ordering process, especially by public pharmacies, and they can report that as a potential event or error in the system which we would never know if they correct it.

Tripp Bradd – Skyline Family Practice – Physician
Can you explain that more?

Russ Branzell – Poudre Valley Health System – CIO
The physician orders a drug. We show up to the pharmacy and the pharmacy calls the physician back and says, "Did you realize this person was on this drug and this drug also from another physician and there's an interaction here?" That happens sometimes when there's a difference between specialists and primary care managing your care.

Neil Calman – Institute for Family Health – President & Cofounder
Yes, I just had that happen last week. A pharmacist called me and said, "Do you realize your patient's on two beta blockers, one that you prescribed and one that somebody else prescribed?"

Russ Branzell – Poudre Valley Health System – CIO
In some cases that can actually slip through and something bad can happen, versus how would you capture that potential error on the ordering process.

Tripp Bradd – Skyline Family Practice – Physician
In this instance it would be a duplication.

Neil Calman – Institute for Family Health – President & Cofounder
Well, it's not a duplication within our system because after the other provider saw the patient I had not seen them to do a med reconciliation, so the point is it's being picked up at the pharmacy, should we be able to report that back to the EHR somehow to pick that up. I don't know whether we can really accomplish that. In other words, you're picking things up at the pharmacy that were not picked up in the EHR, was that your point—

Tripp Bradd – Skyline Family Practice – Physician
Either that or in the actual ambulatory EMR when the drug's ordered and the system identifies it as a potential error, do we report that? Because we're asking that to be reported as near misses on the hospital side, do we want the near misses on the ambulatory side?

Neil Calman – Institute for Family Health – President & Cofounder
I think that's when it works. What we're looking for is where it doesn't work. You'd have to report every time a decision support pops up and warns you of an interaction. I don't think we're looking at that count, or maybe we are. I don't know. I don't think we're looking at that count. At least that's not the way I'm thinking of it. I'm thinking we should try to fill the gaps, so the gap is where problems really occur, how do we get the information reported and also documented. I think the way somebody said that before, quick reporting of the adverse drug events, reporting externally to errors and documented in the EHR, I think that's the concept we're shooting for. Does that make sense to folks?

Tripp Bradd – Skyline Family Practice – Physician
Sure. Again, this is a conceptual type of team, I think.

Neil Calman – Institute for Family Health – President & Cofounder
Yes, right. I wanted to just throw out there whether or not we thought there should be a measure about the med reconciliation.

M
There already is, isn't there?

Neil Calman – Institute for Family Health – President & Cofounder
There's a requirement for it.

M
But then there's a metric that goes along with the requirement. What is the metric?

Tripp Bradd – Skyline Family Practice – Physician
There's a ..., I think, isn't that right?

M
Is that where it is?

Neil Calman – Institute for Family Health – President & Cofounder
It's what?

Russ Branzell – Poudre Valley Health System – CIO
I'm pulling the guide out. I thought there was something in there about the med rec process and how often it has to occur.

Neil Calman – Institute for Family Health – President & Cofounder
Yes, it says transitions of care.

Tripp Bradd – Skyline Family Practice – Physician
But your point is the transition of care could be every time the patient shows up again on the ambulatory side in the office, right?

Neil Calman – Institute for Family Health – President & Cofounder
Especially if they've been seeing consultants or have been hospitalized or been through another provider in the interval, for sure. But the question is how we could create any kind of measure around that.

Tripp Bradd – Skyline Family Practice – Physician
Right.

Neil Calman – Institute for Family Health – President & Cofounder
One way of looking at this might be to look at some of the potential errors that occur when there is no med reconciliation. For example, one of our doctors called out, which I thought was brilliant, the concept of figuring out how to do a decision support any time two medications in the same drug class were ordered. I thought that was actually pretty good, because that's really, at least in our experience, that's when things get really screwed up. They go to the hospital and the hospital has preferred drugs in each category and so they go from one ACE to another, or they go from one beta blocker to another, or one diuretic to another, that's a really common one, and then they come out and combine them and they're on two drugs in the same class.

Tripp Bradd – Skyline Family Practice – Physician
For the sake of illustrative purposes, Dyazide and furosemide or something.

Neil Calman – Institute for Family Health – President & Cofounder
Yes. It doesn't sound like that's ringing a bell with anybody.

Tripp Bradd – Skyline Family Practice – Physician
I will say that, let's take the complex and I'll just use an exception to sort of illustrate it also, you have a congestive heart failure patient who may have a need for spironolactone by measures and then is also on furosemide for controlled symptoms, even though you might override it, it might be good that you measure it as a duplication, correct?

Neil Calman – Institute for Family Health – President & Cofounder
Right. The idea is you're not going to get to zero or 100% with this or Beers or anything else.

Tripp Bradd – Skyline Family Practice – Physician
But for the patient you just described if they're on, again, two different beta blockers, let's say carvedilol and propranolol, you'd want to be measuring that.

Neil Calman – Institute for Family Health – President & Cofounder
Right. I think you want to at least take a second look at those, right? So I don't think your measure would end up at zero but maybe that's another potential drug error. I don't know. I guess maybe that will just complicate things just to think about—

M
The way the standard reads right now is you must maintain an active medication list in accordance with, I believe it's RxNorm. I'm not sure that takes care of the—

Neil Calman – Institute for Family Health – President & Cofounder
In accordance with what?

M
RxNorm, the medication list must be maintained and be active, but I don't know if that corrects an error in there. Giving all the right drugs, according to a standard dictionary just doesn't necessarily fix an error.

Neil Calman – Institute for Family Health – President & Cofounder
Yes, it doesn't really.

Leah Marcotte – ONC
I wonder if we developed measure concepts related to medication errors and just said reporting of accidental overdose, wrong drug, drug taken inadvertently, add drug duplication, therapeutic duplication, and I don't know if that covers—

Neil Calman – Institute for Family Health – President & Cofounder
Maybe more generally failure of med reconciliation and think about how the measures development people might look at those. I think that's good. I think that's helpful. Can we just put that on your list and then move on?

Leah Marcotte – ONC
Sounds good.

M
The only part that I heard that I think is missing in there is the incorrect drug ordered that would still go through, because it could actually still get to the pharmacist.

Tripp Bradd – Skyline Family Practice – Physician
Inappropriate treatment, are you saying?

M
Yes.

Leah Marcotte – ONC
So accidental overdose, incorrect drug, I guess you could say or under-dose, so incorrect dose, incorrect drug, drug taken inadvertently or drug duplication?

Neil Calman – Institute for Family Health – President & Cofounder
Yes. There are ten more categories we could go—

Leah Marcotte – ONC
You're right.

Neil Calman – Institute for Family Health – President & Cofounder

So I don't know how we're going to get to this. I think we should look for things for which there's been some measures development work and then make some suggestions about that. But then there's all the other drug interactions we talked about, drug-drug, drug-lab, drug-disease, drug-allergy, all that stuff.

Tripp Bradd – Skyline Family Practice – Physician
And drug monitoring, that's the other thing that I don't think we—

Neil Calman – Institute for Family Health – President & Cofounder
Well, we're halfway through the call so I want to move us to the hospital space and—

Leah Marcotte – ONC
I wanted to make a really quick suggestion and see what the group thinks about this. We've added some sub-domains within the course of this conversation, but I think what if we just titled one sub-domain "hospital events" and the measure concepts within that would be the hospital acquired infections, either reporting or prevention, falls prevention, screening, and VTE prophylaxis.

Neil Calman – Institute for Family Health – President & Cofounder
If you're thinking about this Tiger Team eventually reporting up to helping to establish criteria for meaningful use for 2013 and 2015, meaningful use is pretty well bifurcated between measures for hospitals and measures for ambulatory providers, for eligible providers.

Russ Branzell – Poudre Valley Health System – CIO
I like keeping it—

Neil Calman – Institute for Family Health – President & Cofounder
Yes, so I think—

Russ Branzell – Poudre Valley Health System – CIO
... keeping the standard is one thing and does it apply to a hospital and does it apply to ambulatory.

Neil Calman – Institute for Family Health – President & Cofounder
Yes.

Leah Marcotte – ONC
We talked about how these three all apply to hospitals, so do we want to just—?

Tripp Bradd – Skyline Family Practice – Physician
Let me interject, Leah, if I may. I would say false prevention starts should start in the office and it goes right back to the Beers criteria for inappropriate meds in the elderly. If you're preventing it on the front side you may prevent it on the hospital side. So I don't think it's just hospital.

Neil Calman – Institute for Family Health – President & Cofounder
Right. For sure all of the—there's even infection control things that apply to ambulatory care, especially if you're talking about office based surgical procedures and things like that. I think we're just trying to pick on certain things that we think are critical factors. So we have five things on the hospital list, medications, and then in addition to that hospital associated infections, falls, VTE prevention, and patient identification errors. This is not my area of expertise. I'm willing to chair this call, but the inpatient space and error prevention is not really my area of expertise. So is there some priority order in which those of you who have more experience than I do would see these issues in relationship to importance?

M
What were the items again?

Neil Calman – Institute for Family Health – President & Cofounder
First, medication errors, hospital associated infections, falls, VTE prevention, and patient identification errors.

M
You could put patient identification underneath medication, because that's where the key point of that is. So we could actually, if we didn't want to have a separate category for that, we could put that as a requirement under medications. As a matter of fact, that's where the Joint Commission and several others put it.

Neil Calman – Institute for Family Health – President & Cofounder
Oh, is that right?

M
Yes. So that would eliminate that as a category. At least the big three that I see on there, the medication errors, the infections and the falls are the major items that are out there in almost all the literature. I don't know how you could take one of those out. The question is, could you fit ... somewhere else underneath that, under one of those other three categories. I don't know if you could.

Neil Calman – Institute for Family Health – President & Cofounder
We don't have to. Somebody else can figure out whether they want to lump or split. I think if we're calling these out and we think they're all important, why don't we come up with a suggested measure concept, or we could first look at the ones that Leah suggested on the sheet and see whether those make sense to us. But in hospital associated infections it said clinical decision supports to promote evidence based prevention and reporting, which is what we said in our last conference call.

M
Is that adequate?

Tripp Bradd – Skyline Family Practice – Physician
I'm sorry, what was that one again? How did you say that one again?

Neil Calman – Institute for Family Health – President & Cofounder
CDS, clinical decision supports to promote evidence-based infection prevention and then reporting of hospital associated infections.

M
Do we want to drill down to specific infection categories that we think should be reported?

Neil Calman – Institute for Family Health – President & Cofounder
I don't think we need to do that.

M
The only reason I say that is one of the papers I was reading is actually the one that's on the Health and Human Services site, where it says that it's basically critical to report on these six categories of health care associated infections.

Neil Calman – Institute for Family Health – President & Cofounder
I guess maybe we should then. Do you know what the six are?

M
Yes. Central line associated bloodstream infections; being on, I'll just read the initials for this next one, CDI, I can't even say that word, clostridium difficile infections—

Leah Marcotte – ONC
Catheter—

M

Catheter associated urinary tract infections; MRSA; SSI, surgical site infection; and ventilator associated pneumonia, which ironically are the six task forces that we have here. So if we forced the system to report those as items, ... in many cases those are items that we're not going to get reimbursed for so we want them in EMR so we can start identifying where they are, it would seem like if the system supported that it would help identify ways to reduce it.

Neil Calman – Institute for Family Health – President & Cofounder
Right. So there are ways you can imagine that catheters and ... lines and other things like that, infections, that we could use EHRs within hospitals to help prompt people to prevent these infections.

M
To the credit of Health and Human Services there's actually a table on this, I'll send this link to everybody, that's actually the associated metrics of each one of those and the five year prevention target. So it literally says how to measure them.

Tripp Bradd – Skyline Family Practice – Physician
Well, plagiarism is a good thing.

M
It's a skill, not a crime.

Tripp Bradd – Skyline Family Practice – Physician
That's right.

Neil Calman – Institute for Family Health – President & Cofounder
All right, well I think—

Leah Marcotte – ONC
I'm sorry. I was just going to say that I'm also going to send out some screen shots later of CDS infection prevention tools that are used by hospitals, just so that people can see what they look like.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
Yes, I was going to say for CDS I think we're going to need to get a little bit more specific, because CDS is such a broad term and I think with phase one it was so poorly defined that it caused the vendor community's heads to spin a little bit. From my view, again, we need to be very specific about what CDS is and what it isn't.

Neil Calman – Institute for Family Health – President & Cofounder
I think we can look at those and we can look at that additional information and we'll make some recommendations about how to play that out.

Russ Branzell – Poudre Valley Health System – CIO
I'm curious, on the ambulatory side some of this actually may apply because there are minor procedures that occur in the office place, vasectomies and other things such as that, that these would actually apply to them in some cases, surgical site infections, if that applies to your ambulatory environment then you need to report on it in the ambulatory EMR.

Leah Marcotte – ONC
Similar to time outs, other extending surgical time outs—

Russ Branzell – Poudre Valley Health System – CIO
Absolutely.

Leah Marcotte – ONC
My other suggestion for this group if we did just rename this hospital associated events we already have two measures, and we can put VTE right underneath that.

Neil Calman – Institute for Family Health – President & Cofounder
Or if ... events, so then you can put falls under that too.

Leah Marcotte – ONC
Right, under ... measures.

Neil Calman – Institute for Family Health – President & Cofounder
Yes.

Leah Marcotte – ONC
Or we could—

Russ Branzell – Poudre Valley Health System – CIO
Back on the one on infections, instead of calling it hospital based can we just call it "nosocomial infections?" The reason being if it's in the office space it's not hospital.

Neil Calman – Institute for Family Health – President & Cofounder
Yes. I'm not sure we want to call this out for eligible providers, only because I'm not sure that it's common enough. Think about the provider sitting in their office going, oh, great, now I need to be able to do all of this stuff. We're trying to stick with the things—two things—that are more broadly applicable across the universe of folks that are seeking payments under the intent of payments in 2013 and 2015. I'm just not sure that it's common enough, that if we started calling out some of this stuff on the ambulatory side that it wouldn't be irrelevant to the majority of people.

Russ Branzell – Poudre Valley Health System – CIO
We've got surgery centers, we've got office based procedures, and that would force that to apply to those.

Neil Calman – Institute for Family Health – President & Cofounder
Right.

Russ Branzell – Poudre Valley Health System – CIO
If we didn't put it in there—and that's part of the problem now is things that are done outside the hospital in same day surgery centers don't have that reporting requirement. If it was under the eligible provider, under that environment they'd have to report on it. There's a lot of stuff done in surgery centers.

Neil Calman – Institute for Family Health – President & Cofounder
Okay, well let's leave it in and we can just say that this is relevant also to eligible providers. The main bifurcation has got to be EPE and hospital, because that's the way all the requirements are. But we can call out a particular requirement like this and say that it's relevant to both, which I think is what you're suggesting, correct?

Russ Branzell – Poudre Valley Health System – CIO
Correct.

Neil Calman – Institute for Family Health – President & Cofounder
Okay.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I would generally agree, although I'd point out that many, if not most, surgical centers don't actually have EHRs and the EHRs are used by the EPs in their "home office," which is their clinic site but not where they do those procedures. It may be tough to catch that stuff where it happens.

Neil Calman – Institute for Family Health – President & Cofounder

Interesting. Can we go on to the issue of falls? I guess my question here really is, what's the IT enabler here? Is it around medications? Is it around ambulation orders in the hospital? Again, I'm pretty ignorant here in terms of the hospital piece of this.

Russ Branzell – Poudre Valley Health System – CIO
I think there's two sides to this, there's the prevention side and the reporting side. Is the EMR enabled to help support the process of falls identification and prevention? That's no different than you have medication error prevention on the front end and some of that is being developed. The other side of this is appropriate reporting based on an established criteria that the EMR can capture. Right now we would put it in a free text area of which wouldn't be minable. It's not a hard coded environment in which you have to have an incident that's codified that you could report on.

Tripp Bradd – Skyline Family Practice – Physician
Do you mean if someone falls?

Russ Branzell – Poudre Valley Health System – CIO
Correct. You could do it in a standard text report, versus the standards of just something ... they fell here or the issues based on all that criteria. On the prevention side this is systems support identification of different levels of falls risk.

Tripp Bradd – Skyline Family Practice – Physician
The at-risk populations are what we're talking about, either by age or by diagnosis, for instance, neurological problems, or by medications. So just like I think they have one measure in the core of people under 5 and over 65, it might be reasonable to consider this, particularly with you've got a cut point somewhere because you wouldn't want to have to do a falls assessment on a 40-year-old marathoner, but everyone over 65, you may want to have a metric of asking about falls and perhaps falls prevention training or whatever. Would that be a reasonable thought process here?

Russ Branzell – Poudre Valley Health System – CIO
Either that or something as simple as a complete fall assessment was done on all high-risk or moderate risk based on whatever the national standard is. I'm looking at our high-risk, its recent history of falls, lower extremity weakness, balance ... gait impairment, blah, blah, blah. If those are in a pre-assessment done as part of a hospital stay, does the system force a falls assessment to be done and was that done on all those high-risk patients?

Neil Calman – Institute for Family Health – President & Cofounder
Okay. So the actual ability to do the falls assessment, would you see that as something that's just built into a framework for decision supports or questionnaires in the system, or something that we would call out as something we think should be hard wired into an EHR?

Russ Branzell – Poudre Valley Health System – CIO
I think it definitely should be part of the decision support, that if you checked these six boxes on a history and physical it would fire off some intelligence to say you need to do a risk assessment for falls, and did you put your ... things in place? So I'm not sure that answers your question, but I would say definitely it's on the decision support.

Tripp Bradd – Skyline Family Practice – Physician
That could be triggered by ICD-9 codes also, ambulatory dysfunction, or like you mentioned, lower extremity but any neurologic problem or just by age. Peter Bash had a homegrown assessment process that certainly could be HIT sensitive. I'm sure Jacob Reider would weigh in on this with regard to how the vendors would respond, because it is somewhat nebulous on the front end. Wouldn't you agree, Jacob?

Jacob Reider – Allscripts – Chief Medical Informatics Officer
Yes, it is. I would say some kind of diagnostic codes, but that's where we struggle is how one defines these things to start the cascade of processes.

Neil Calman – Institute for Family Health – President & Cofounder
Yes, diagnostic codes, some diagnoses, some medications, some things in the ... in what might be medical or surgical history, some things that might be in the substance history, people who are alcoholics. You can pull risks from lots of different places.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
Exactly. So if you say high-risk, we would need guidance from NQF and very, very specific criteria. I think, just for example, there's an ambulatory quality measure in stage one and there's a similar one for hospital, the hospital one is the terminal illness and/or comfort care, so all patients need "x" unless they're on comfort care, and the ambulatory one is all patients need "x" unless they have a terminal illness. How do you define those things? What's comfort care and what's terminal illness? Various vendors have found their various ways to proxy those, but I can tell you that there's been a lot of frustration about those things, where the definition is so vague and I would think we'd want to guide NQF, or whoever's doing this for CMS, to define very explicit measures so that it's not so vague.

Russ Branzell – Poudre Valley Health System – CIO
Could this be aspirational?

Leah Marcotte – ONC
Yes, I think that's a great idea.

Neil Calman – Institute for Family Health – President & Cofounder
Okay. Let's try to define this and we'll move on to the next topic. Now, Leah, do you just want to talk about the structure that you were proposing again? You were thinking of the VTE prevention as fitting under one of these categories as well?

Leah Marcotte – ONC
Yes, if we just make hospital associated events, since VTE prophylaxis is mostly hospital. Even though hospital associated infections must have an evidence basis in hospitals, even though we should be thinking about extending it out to outpatient practices where relevant, I think we could just, for the purpose of lumping things together and making things a little bit easier to manage, we could just say hospital associated events, including infection and VTE, if everyone agrees with that.

Neil Calman – Institute for Family Health – President & Cofounder
Then the patient identification piece we're going to put under medication safety?

Leah Marcotte – ONC
Yes.

Neil Calman – Institute for Family Health – President & Cofounder
So we haven't really talked about the VTE prevention, but I think that's probably the easiest of all of these in terms of alerts for particular conditions and particular pre-disposing factors and particular types of procedures and stuff like that. Then looking for orders for prophylactic treatments, to me that seems like a fairly straightforward prevention mechanism that could be very clearly EHR enabled or assisted. Would people agree?

M
Yes.

Leah Marcotte – ONC
Yes. There's actually a good evidence base behind VTE prophylaxis with respect to clinical decision support. I sent out, I think there was a paper in *JAMA*, I'm not sure, on that two page sheet and summarized the results, that implementing clinical decision support significantly increased ordering habits and incorporating into workflow made, there was a significant decrease in venous thrombotic events as well.

Neil Calman – Institute for Family Health – President & Cofounder
Okay, well that seems like a slam-dunk to put into this, as does the falls. I think the infection piece seems fairly straightforward. I think we should spend a few minutes on the medication safety issues related to hospital. Are they the same as the ones that we were discussing for the ambulatory providers?

Russ Branzell – Poudre Valley Health System – CIO
I'm trying to remember what we said last time when we ... this. The difference there is the prevalence of the closed loop medication and the ease of reporting of near miss and insignificant events. I think that's a greater burden on the hospitals to report that, and maybe it's the same because we're reporting it, but right now there's no requirement in the system for bedside med verification. It seems like as basic a patient safety issue as you can get for medication administration. The only thing in phase one was CPOE.

Neil Calman – Institute for Family Health – President & Cofounder
Do we know on the hospital side what the most prevalent medication errors are? Are they patient identification errors? Are they wrong dosages? Do we know what the evidence base of this is in terms of things that have been reported? Does anybody know? I don't know for sure.

Russ Branzell – Poudre Valley Health System – CIO
I don't know the exact facts on it. I know what we've discovered here is that there's two levels of this. One, there's a lot of stuff that's ... that's never been caught and we wouldn't even call it near misses, it's just stuff that hopefully a human would have caught anyway, but it heightens the entire alertment process to the administration process, especially when you're going from Pyxis to room and those two aren't next to each other. It's the only last verification process at the bedside post pull.

Neil Calman – Institute for Family Health – President & Cofounder
Post what?

Russ Branzell – Poudre Valley Health System – CIO
Post pull from the Pyxis unit.

Neil Calman – Institute for Family Health – President & Cofounder
Okay. I don't even— What is a Pyxis unit?

Russ Branzell – Poudre Valley Health System – CIO
A Pyxis unit is where you go get your drugs, so somebody puts the order in the system and a drawer pops up and it says, okay, here's what you're supposed to be taking out, and you grab it. Then—

M
... brand.

Russ Branzell – Poudre Valley Health System – CIO
Yes.

Neil Calman – Institute for Family Health – President & Cofounder
I'm sorry?

M
It's a brand of dispensing meds from a particular unit. The pharmacy every morning will—

Neil Calman – Institute for Family Health – President & Cofounder
Loads it up.

M
... carry it out, loads it up, and then the nurses unload it through the day.

Russ Branzell – Poudre Valley Health System – CIO
That was actually a fairly significant concern with a lot of the hospitals we were working on providing comments for phase one, was that one of the basic prevention functionalities of bedside med was not included.

Neil Calman – Institute for Family Health – President & Cofounder
And that is this closed loop medication process?

Russ Branzell – Poudre Valley Health System – CIO
Bedside med verification is the—

Neil Calman – Institute for Family Health – President & Cofounder
Bedside med verification, okay.

M
Some of that's ID related too, isn't it?

Russ Branzell – Poudre Valley Health System – CIO
Absolutely. You have to have some form, whether it be RFID, bar code, two factor authentication at the bedside, there's a whole prescriptive process for that. The hospitals that have done it across the country were reporting significant changes in errors, problems—

Neil Calman – Institute for Family Health – President & Cofounder
So they're not re-identifying the medications that they're giving, they're re-identifying the patient that they're giving them to?

Russ Branzell – Poudre Valley Health System – CIO
No, they're doing everything. They're doing right drug, right dose, right person, right time, the five rules of right, and I never get the fifth one, right location, right route—

Neil Calman – Institute for Family Health – President & Cofounder
Charge the right price.

Russ Branzell – Poudre Valley Health System – CIO
Right route, I think that's it.

Neil Calman – Institute for Family Health – President & Cofounder
Okay, so how would you like to call this out? Again, I need your help here.

Russ Branzell – Poudre Valley Health System – CIO
I think this one's fairly simple, that we would say some percentage initially of drugs administered in the hospital are administered in support of bedside med verification percentage, so whatever that is, 75% of all drugs to start with, that somebody else to decide it's no different than the CPOE measure.

Neil Calman – Institute for Family Health – President & Cofounder
Some percentage of drugs administered in the hospital are administered—

Russ Branzell – Poudre Valley Health System – CIO
And checked and supported using bedside med verification. I think that—

Leah Marcotte – ONC
I think that sounds like a—

Russ Branzell – Poudre Valley Health System – CIO
I think this would ring true with almost every hospital that's out there, because we talk to CIOs all over and this is on their top two or three projects almost across the board, or they've already implemented it.

Neil Calman – Institute for Family Health – President & Cofounder
Does somebody else have a comment on that?

Jacob Reider – Allscripts – Chief Medical Informatics Officer
It's just maybe a process question, and maybe it's a Leah question. This sounds and feels sort of like a meaningful use process measure rather than a clinical quality measure. I support it conceptually. Is it in scope for us, though, that's maybe my question?

Neil Calman – Institute for Family Health – President & Cofounder
I think it is. It's a patient safety measure, and that's exactly what we're supposed to be thinking about. It's a patient safety problem is what I'm hearing, and all of those we're supposed to be thinking of in relationship to whether or not electronic health records support improvement or prevention of those errors and then what we would do to verify that people were using them through the way of reporting or improving outcomes through the way of reporting.

M
I think this one is as basic a fit as you can get for patient safety improvement and reporting, because the system has to be able to report the verification process.

Neil Calman – Institute for Family Health – President & Cofounder
Okay.

Leah Marcotte – ONC
We can also just put this in the aspirational category too. This measure probably wouldn't be ready for stage two just because it's not developed at all yet, it's still conceptual. By that time maybe the meaningful use rules will also require med verifications.

Neil Calman – Institute for Family Health – President & Cofounder
Yes.

Russ Branzell – Poudre Valley Health System – CIO
Why do you say that it wouldn't be ready? I'm confused.

Leah Marcotte – ONC
For stage two I'll just briefly go over the classification of measures. Measures we say are either baked, they're ready to go, or they need baking, they need some development, so they're a measure that exists and people use them and they don't have electronic specifications, which is the case with a lot of the NQF endorsed measures. Then there's a third group that's kind of aspirational measures, so measures that haven't been developed yet, people haven't been using, so in terms of stage two, those aspirational measures we probably won't be able to get to, we probably won't be able to include them just because they'll need some ... working.

M
Leah, if I may ask, Russ, since you are in contact with other hospital systems, is this already baked but not used, so that it really isn't as aspirational as Leah is suggesting?

Russ Branzell – Poudre Valley Health System – CIO
I think this is 100% baked already. What percentage of drugs were verified using the bedside closed system? I can guarantee you if I look at the number at a Methodist hospital in Dallas and mine, I'll be able to tell the difference. They may say if 20% of our drugs coming from a distributor are not single package dosed then we don't have a single package dosed system yet. Well, that's part of their problem. They still put it in little cups. So personally I don't think this is an aspirational one. I think this is real technology is in all the core major inpatient EMRs and we need to force the usage of it.

Leah Marcotte – ONC

I completely agree with that, but I'm wondering whether, as was mentioned earlier, this is kind of meaningful use, this percentage of patients need to be administered medication based on medication verification systems, versus whether it's an actual measure that we're going to develop, an electronic measure to document that. I'm not sure, actually. I'm not sure of the answer to that.

Neil Calman – Institute for Family Health – President & Cofounder
I think if you're looking at the process measure then what I'm hearing is even though it's not NQF endorsed it's a pretty easy measure to describe. I think if you're looking at the outcome measure and how that's related to adverse events, that becomes a harder issue. But I think if you're saying was this process used in this institution and to what extent was it used in relationship to the number of medications that were prescribed, that seems fairly straightforward. But, as I've come to learn, all these things that seem very straightforward aren't when you drill down, so you're talking about medications and you're talking about different types of medications and are you talking about continuous infusions? The people who dig into this stuff will find 12 different questions to ask, but I think we should call it out as something that I don't think it's our job right now to decide whether it's aspirational or baked or whatever, I think that's something that we're going to need to look at when we look at what measures are out there and available, which we've started to do, but I don't think that's complete yet. It's not just NQF endorsement measures, there may be, as you're pointing out, things that are easily generated from electronic health records.

Leah Marcotte – ONC
Right, and I didn't mean just NQF.

Neil Calman – Institute for Family Health – President & Cofounder
Yes.

Leah Marcotte – ONC
So all the Appendix C measures, for example, the measures that are being used. This is just very nit-picky. I just don't know whether this would need to be in meaningful use, in stage two meaningful use, to have a measure for it, if that makes sense, which is I think the point that was brought up earlier but I'm not sure.

Neil Calman – Institute for Family Health – President & Cofounder
I think what can be done is if the functionality is not there for some of these things, and this would be true across the board, then by calling it out as something that we're going to measure in stage three, what you call out is the need to develop the functionality in stage two.

Leah Marcotte – ONC
Okay, that sounds good.

Neil Calman – Institute for Family Health – President & Cofounder
So I think we've pretty much gotten through the list.

Leah Marcotte – ONC
Would it be helpful for me to just go through what we talked about and the measure concepts we talked about under each domain and sub-domain?

Neil Calman – Institute for Family Health – President & Cofounder
Yes.

Leah Marcotte – ONC
So under medication safety I have reporting an adverse effect basically, an allergy of a correctly administered drug, and then also maybe separately if that adverse effect is documented whether the allergy was documented into the electronic health record. So that's the errors reporting plus the documentation of allergy. Secondly, reporting medication errors, so we've discussed the various types of medication errors that result in adverse events. Then, patient identification within medication safety using

bedside med verification underneath that, and also clinical decision support, I believe that was actually for the medication error. Then secondly, is there anything I'm missing on medication safety? Okay. For hospital associated infections ... nosocomial we were saying events, I guess, because we're adding VTE, the reporting of infections using CDS to promote evidence based hospital acquired infection prevention for the six types of infections that were mentioned, and then thirdly, VTE prophylaxis using clinical decision support, developing a measure for that. Is that it for hospital associated events?

Neil Calman – Institute for Family Health – President & Cofounder
I think so.

Leah Marcotte – ONC
Okay. For falls, this would be—

Neil Calman – Institute for Family Health – President & Cofounder
We're not going to include falls under the hospital associated events?

Leah Marcotte – ONC
Well, the only reason— I didn't know that we can show a conclusion for that. The only thing that I would think may be a little bit different about falls is that falls we said kind of go under inpatient and outpatient, so that it might be better as a sub-domain by itself. I don't know how people feel about that.

M
Sure, because some falls lead to admission, and to the extent that we prevent them, again, it's an aspiration of every practice to prevent them, wouldn't you agree, guys? So I think it should be part of the ambulatory measure, if not from an aspirational ....

Russ Branzell – Poudre Valley Health System – CIO
Well, if you look at the requirements of the medical home, that's actually one of the things you're trying to avoid is home falls.

Neil Calman – Institute for Family Health – President & Cofounder
Okay.

Leah Marcotte – ONC
Okay, so under falls we have reporting, prevention just for high risk, whether that be age determinant or other risk factors, and then also using clinical decision support to determine patients who are at high risk for falls.

Neil Calman – Institute for Family Health – President & Cofounder
Right. I wouldn't just call out age, I would say age and other factors.

Leah Marcotte – ONC
Right, and diagnosis, medication, history of falls.

Neil Calman – Institute for Family Health – President & Cofounder
Yes.

Leah Marcotte – ONC
Then we also talked about at the beginning this idea of missed lab results. I did do a very brief literature search and found an Art funded project that I can send out, "Improving Management of Test Results that Return after Hospital Discharge." I know that we were talking about ambulatory, but this is sort of the same idea.

Neil Calman – Institute for Family Health – President & Cofounder
Actually, it's different. The hospital issue is really patients are under the care of a doctor in the hospital and things are ordered that don't come back while a patient's still there, and so once the patient's

discharged results like that can come to a floor or can go nowhere or can get lost completely. That's like a very specific kind of problem, and very different than what we were talking about, which is kind of the general—

Leah Marcotte – ONC
The outpatient results—

Neil Calman – Institute for Family Health – President & Cofounder
Yes, I wouldn't put that in the same category.

M
Yes, ...

Leah Marcotte – ONC
But along those lines, I'll look to see if I can find any studies regarding that to see if we do even have evidence to go off of, but I'd put that under an overarching diagnostic errors category and I didn't know how the group felt about maybe saying in our recommendations that this should be a sub-domain that may be developed more as time goes on and there's more attention towards diagnostic errors in the patient safety realm.

Neil Calman – Institute for Family Health – President & Cofounder
Yes, I think that's fine. I think you need to hear what people are saying, which is just this isn't about making an error in the diagnosis. This is about an error in the workflow of the way reports come back in electronic health records. So I wouldn't even put it in the category of diagnostic errors.

Leah Marcotte – ONC
So it wouldn't even be like a prevention, you wouldn't think? I just saw it as a prevention of diagnostic errors, but we can—

Neil Calman – Institute for Family Health – President & Cofounder
I know. The way it was called out was I think it was called out appropriately as basically EHR related errors or related safety problems. I think that this is one of a few that were mentioned that we should talk about. That was one—

Leah Marcotte – ONC
And then the medication errors.

Neil Calman – Institute for Family Health – President & Cofounder
Right, the medication errors, the drop down selection errors, there's a whole list of these that have been outlined. I'm sure there's more that nobody's really called out. But what we really wanted to do there was to highlight the fact that at this stage in the EHR evolution there should be an easy mechanism for reporting those so that vendors and others could work on them.

Leah Marcotte – ONC
Okay, I see. I apologize for—

M
... maybe refer to this as results of learning and monitoring.

Neil Calman – Institute for Family Health – President & Cofounder
As one aspect of an EHR related error.

M
Correct. If the data is there but the person doesn't see it, it's just as bad as bad data.

Neil Calman – Institute for Family Health – President & Cofounder

Yes, I think that this is really important for ONC because the naysayers about EHRs are always pointing to this stuff, like we how do we know care's not going to get worse and I think the fact that we actually put something in that looks at that is a really important addition to our group of issues.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
I agree. I can tell you that from the vendor community there is, especially from mature vendors, great enthusiasm for exactly what you just said, Neil. We want to shine the flashlights on ourselves rather than put our heads in the sand and pretend that this isn't happening.

Neil Calman – Institute for Family Health – President & Cofounder
I think that's good.

Tripp Bradd – Skyline Family Practice – Physician
I know we subjugated identification just of medications, but as I was thinking about this in a broader perspective, and I'll just use it as from the negative side, misidentification of patients leads to wrong prescriptive errors in not only medicines but labs, tests, misappropriation of diagnoses. So, if you will, and this is a process we have in our office, is really taking a time out, just to overuse that term, for every particular thing are you this person that's getting this lab done, and again I think it isn't just medicines, and of course that's the one that's under the spotlight the most, but across the board other prescriptive things seem to get misappropriated sometimes too because of the ID problems.

So I just wanted to throw that back out. If you guys want to tell me that I'm full of saw dust, correct me, but I really think if you think about the scope of a practice, that is, of clinical care, it isn't just meds. I'll just be quiet at this point.

Jacob Reider – Allscripts – Chief Medical Informatics Officer
You're not full of saw dust at all. This is selection error for medications. This is if the vendor product makes it too easy to select left or right, maybe you do the wrong thing on the wrong side. So in some cases we need to make things harder so that they're more accurate. This is a fascinating balance that has to be weighed.

Russ Branzell – Poudre Valley Health System – CIO
The only reason I had said to put it under medication was there are some systems that do not ingrain and support in it easy identification systems, meaning if it's in there for the medication, which I consider to be one of those if we've got to have it in there, I'm also going to have it in our system for a lab, I'm going to have it for surgery. It's more of a concept than it is specifically about meds. I don't care where we put it personally, as long as we absolutely highlight patient identification. It's everywhere. It's the flow of the inpatient the second we cut their wrist off and we tell them to walk down the street to our own pharmacy and then they can't identify them.

Tripp Bradd – Skyline Family Practice – Physician
Is it fair, did I create problem here? But I think it's more global than just meds.

Russ Branzell – Poudre Valley Health System – CIO
Yes.

Neil Calman – Institute for Family Health – President & Cofounder
That's the way it was originally presented, I think, was more global than meds. But then I heard a statement earlier on in the conversation that we thought that the major issue was around medication.

Tripp Bradd – Skyline Family Practice – Physician
I was the one, and that's why I didn't—

Neil Calman – Institute for Family Health – President & Cofounder
And you—

Tripp Bradd – Skyline Family Practice – Physician
Yes. I've been in practice, like you, Neil, and probably like other folks are in the clinical field long enough, decades now, as my gray hairs would indicate, and having seen the errors it always comes back to ... the wrong patient in the wrong place at the wrong time or something. It just keeps coming up and up again and if EHR can somehow lower that, that's a great thing.

Neil Calman – Institute for Family Health – President & Cofounder
The Joint Commission standards talk about identification of patients, reidentification of patients, and the operationalization of that is pretty bizarre when you go into a room with somebody who you've known for 20 years and say hi, I'd like to verify your name and your birth date, and people look at you like maybe we should get another doctor who doesn't have as many gray hairs and hasn't lost as many brain cells at this point.

Tripp Bradd – Skyline Family Practice – Physician
Maybe that will prevent you from making the error in ten years, Neil.

Neil Calman – Institute for Family Health – President & Cofounder
Right. I think it doesn't really matter where we categorize this stuff at this point. I think this is going to go through so many evolutions from here on in, I think we can leave this as a separate topic and just call out that we think this is most relevant in the realm of medications, but also relevant in other areas as well.

I think we've completed our task for today. Leah, would you agree?

Leah Marcotte – ONC
Yes.

Neil Calman – Institute for Family Health – President & Cofounder
Can we open to the public?

Russ Branzell – Poudre Valley Health System – CIO
I had a task from last week to get more information on the falls prevention and all that kind of stuff. I have that and we ... identified the organization. Do you all want me to send it to you, or are we past that?

Neil Calman – Institute for Family Health – President & Cofounder
No, I think you should send it to Leah and she can put it in the compendium of things. Or you can take the reference stuff and put it right into the SharePoint site.

Russ Branzell – Poudre Valley Health System – CIO
Okay, I will.

Leah Marcotte – ONC
Under patient identification measure concepts are reporting of patient identification errors, whether they be radiologic, lab, medications, and also bedside med verification. Was there any other—?

Neil Calman – Institute for Family Health – President & Cofounder
The bedside med verification, yes, was part of that other concept. It is part of this as well, for sure.

Leah Marcotte – ONC
Okay, was there any other patient identification that I'm missing, or did we want to include CDS in that or just kind of leave it at that for now?

Tripp Bradd – Skyline Family Practice – Physician
Jacob, I'd ask you as a vendor person, how about photographs of patients? Again, it's a relatively simple thing to do that most EMRs have the capability of doing that could be ....

Jacob Reider – Allscripts – Chief Medical Informatics Officer

Yes, so I would hesitate ... proscriptive statements like how, so that's a how. I think if we define what we're in better shape.

Tripp Bradd – Skyline Family Practice – Physician
That's fine.

Neil Calman – Institute for Family Health – President & Cofounder
Any last comments before we open it up for public questions, if there are any? Okay, can we ask the operator to do that? Operator?

Operator
We have no questions in the queue at this time.

Neil Calman – Institute for Family Health – President & Cofounder
Okay, in that case I wish you all a good afternoon. The follow up from this will be that there will be some additional documents that we'll be working on and I think I would like to see them sent out to the whole group for review prior to our presentation at the end of the month. So hopefully we'll be able to keep our comments moving in the same direction.

... to go back over anything from the beginning but I think, as I said at the beginning of this call, there will be a lot of other iterations of this and a lot of other people reviewing this and I think we've done a good job at generating a lot of ideas and surely will be feeding forward a lot of things that need further exploration and some measure development. So I want to thank you all for your participation and for your continued participation when we get you out some materials to look at.

Tripp Bradd – Skyline Family Practice – Physician
Thank you, Neil. You've done a great job.

Russ Branzell – Poudre Valley Health System – CIO
Hey, Neil, thanks for everything. What happens on the 28th, at the next big meeting? Isn't that for everybody? What happens at that meeting?

Leah Marcotte – ONC
That's the big policy meeting where all of the measure concepts will be discussed, so all of the measure recommendations from each Tiger Team will be discussed at that meeting and presented. So from us we'll need to submit that filled out, these are the documents Neil was speaking of, the filled out Tiger Team worksheet, as well as a two page summary of recommendations and then just the PowerPoint slide for the presentation, which we'll take care of but we'll—

Neil Calman – Institute for Family Health – President & Cofounder
That's going to be at the measures workgroup, right?

Leah Marcotte – ONC
Yes.

Neil Calman – Institute for Family Health – President & Cofounder
The quality measures workgroup.

Leah Marcotte – ONC
Right.

Neil Calman – Institute for Family Health – President & Cofounder
The quality measures workgroup, just so you can picture the organizational chart, is looking at this one piece of what the meaningful use committee is working on, just trying to sort of establish the criteria for meaningful use for stage two and three. Their recommendations get reported to the whole HIT policy committee, so there will be a lot of reviews.

Thanks again, everybody. We'll look forward to speaking to you again soon.